## **CALIFORNIA GEOLOGICAL SURVEY**



# HINTS FOR GOLD PROSPECTORS

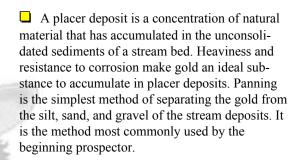
NOTE 24

The search for gold still offers a special excitement for many people. They hope to "strike it rich" by panning gold. What they do not realize is that most placer deposits have been thoroughly reworked at least twice—first by those who entered immediately after the initial boom periods of the late 19th century to glean the lower grade deposits and tailings and later by prospectors during the Great Depression of the 1930s. During the "rush" of the 1970s and 80s, when the price of gold was at an all-time high, many of these areas were worked once again.

Nevertheless, a chance for success may still remain if you choose favorable areas after a careful study of their geology and mining records. If you are prepared to undergo a certain amount of hardship, possess a vehicle capable of traveling the roughest and steepest roads, and are not discouraged by repeated disappointments, a prospecting trip may prove to be interesting.

The search itself is often its own reward, but there are things you should consider before setting out on a prospecting expedition.

- It is a conservative estimate that about 1 in 1,000 people who have prospected in the western United States ever made a "strike." Most of the gold mining districts in the west were located by pioneers, many of whom were experienced gold miners from Alabama and Georgia. Even in those pioneering times however, only a small number of prospectors found valuable deposits. However, the best chances of success are in known productive areas, rather than in unknown areas.
- Lode gold is gold within solid rock. The areas that are likely to contain valuable lode deposits of gold have already been explored carefully and thoroughly. These days the inexperienced prospector without ample capital has very little chance of discovering a lode rich enough to develop. Such known areas in California are the Mother Lode, Grass Valley-Nevada City, and Alleghany districts.



- ☐ The gold pan, an indispensable prospecting tool, is versatile, efficient, inexpensive, and portable. With some practice, even an inexperienced panner should be able to recover most of the gold from the sand and gravel. Gold is much heavier than the minerals that make up the sand and gravel; when the water is shaken and swirled, the grains and flakes of gold sink and collect on the bottom of the pan. As the lighter materials are winnowed from the gold, they are removed from the pan.
- Many placer districts in California were mined on a large scale in the mid-1950s and as recently as the mid-1980s. The streams that drain the rich Mother Lode—the Feather, Mokelumne, Sacramento, American, Cosumnes, Calaveras, Yuba, and Trinity rivers in northern California, have concentrated considerable gold in gravels.

#### A REMINDER!

You must always obtain permission from the owner to prospect on private property. Before prospecting on federal land, contact the U.S. Bureau of Land Management at (916) 978-4400.

A recommended source of information is U.S. Bureau of Land Management Special Publication 1996, *Location and Patenting of Mining Claims and Mill Sites in California*.



### Offices of the California Geological Survey

**Publications and Information Office** 

801 K Street, MS 14-33 Sacramento, CA 95814-3532 (916) 445-5716 Southern California Regional Office

655 South Hope Street, Suite 700 Los Angeles, CA 90017-3231 (213) 239-0878 **Bay Area Regional Office** 

185 Berry Street, Suite 210 San Francisco, CA 94107-1728 (415) 904-7707

# Selected Gold-Related Publications of the California Geological Survey

- CD98-001 California Gold Mines: A Sesquicentennial Photograph Collection on CD-ROM. 1998
- B193 Gold Districts of California, Sesquicentennial Edition: California Gold Discovery to Statehood (includes new mine list). Scale 1:1,000,000. 1998
- → MM009 Map of California Historic Gold Mines. The California Gold Discovery to Statehood Sesquicentennial (1998-2000) Edition. Scale 1:1,500,000. 1998
- The Elephant as They Saw It: A Collection of Contemporary Pictures and Statements on Gold Mining in California (1500-1860). 1997
- SP098 Fluvial Geomorphology and River-Gravel Mining: A Guide for Planners, Case Studies Included. 1990
- O SP103 Mines and Mineral Producers Active in California (1997-98). Scale 1:500,000. 1999
- SP034 Geology of Placer Deposits. 1970.
- O SP041 Basic Placer Mining. 1946
- O SP087 Placer Gold Recovery Methods. 1986

To order one of these publications (or any other California Geological Survey publication) call 916-445-6199.

Graphics by Dinah D. Maldonado, California Geological Survey.

Visit the California State Mining and Mineral Museum in Mariposa, along historic Highway 49. P.O. Box 1192 Mariposa, CA 95338 (209) 742-7625

www.conservation.ca.gov